

**A Dissertation
On
An Investigation on Problems and Prospects of Gaming Industry
in Assam**

**Submitted For the Partial Fulfilment of The Degree of Master of
Commerce Under Gauhati University**



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Nalbari Commerce College, Nalbari

Submitted By

**Debasis Das
Roll No. PC-221-200-0010
Registration No. 19072091
Nalbari Commerce College, Nalbari**

Under the Supervision of

**Bibhuti Bhusan Das
HOD, Dept. of Management, Nalbari Commerce College, Nalbari**

DECLARATION

I hereby declare that this dissertation entitled “**An Investigation on Problems and Prospects of Gaming Industry in Assam**” embodies the result of my original work carried out under the supervision and guidance of Bibhuti Bhusan Das, *HoD, Department of Management, Nalbari Commerce College, Nalbari*, and submitted for the partial fulfillment of the requirement of M. COM. 3rd semester examination. To the best of my knowledge and belief, the findings in the project are based on the data collected and have not been extracted from any published work or journals except those specified in the Bibliography. I further declare that neither the dissertation as a whole nor any part of it has been submitted so far elsewhere for any research degree or diploma.

Date

Place: Nalbari Commerce College,
Nalbari

(Debasis Das)
Roll No. PC-221-200-0010
Registration No. 19072091

Bibhuti Bhusan Das,
HoD,
Department of Management,

NALBARI COMMERCE COLLEGE,
NALBARI

CONTACT

Ph. 88221 28077

e-mail:

bbdas_ncc@rediffmail.com

CERTIFICATE

This is to certify that Debasis Das, a student of M. COM. 3rd Semester, of Nalbari Commerce College, Nalbari has prepared his dissertation entitled “**An Investigation on Problems and Prospects of Gaming Industry in Assam**” for the partial fulfillment of the requirement of Degree of M. Com. course under my guidance and supervision. This dissertation is the result of her sincere effort and no part of it has been submitted to any other Department University or Institution for any degree.

(Bibhuti Bhusan Das)

Head, Department of Management

Nalbari Commerce College

Nalbari

Date:

Place:

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Additionally, I would like to thank Nalbari Commerce College and the Department of Commerce at Gauhati University for providing me with an opportunity to conduct a research study.

I sincerely regret any mistakes or omissions I made in putting together this report.

Date:

Place: Nalbari Commerce
College, Nalbari

(Debasis Das)

SYNOPSIS

Title of the project:

“An Investigation on Problems and Prospects of Gaming Industry in Assam”

Introduction and Objectives:

The gaming industry is one of the most exciting industries in tech because of its importance to culture, entertainment, and technological advancement. The gaming industry is no longer a niche arena for a certain age group or consumer segment. With the advent of mobile gaming and improvements to the hardware used in playing these games, gaming has become a viable form of entertainment for players from all backgrounds and ages. The gaming industry in India is on a roll. Traditional games are gradually being replaced by video games, which has a direct effect on how internet users spend their free time. The availability of platforms and game distribution systems is a key factor in the explosion in online gaming interest. In recent years, the gaming industry, which includes innovative professionals, has risen to prominence. The gaming industry is expanding as per capita income grows, interest rises, and the number of dual-income households rises, all of which are contributing to the market's transformation. The market is expected to expand rapidly in the future, thanks to the increased use of smartphones and consoles, as well as cloud penetration. This research paper focuses on the subject of the evolution and growth of the gaming industry in India. The study aims to find out the market size of the Indian Gaming Industry along with the career opportunities in the Indian Gaming Industry.

Objectives of the Study:

The study is conducted to:

1. To find out the demand and market size of gaming industry in Assam.
2. To examine the government measures to regulate online gaming.
3. To know about the financial conditions of gamers of Assam.
4. To find out the problems faced by the gamers of Assam.

Methodology:

The Study was conducted to gather information on the various facilities and problems that are facing by the gamers. The nature of the study is descriptive and analytical. A survey was conducted to collect data on the gaming habits and preferences of a group of individuals. The Primary source of data was mostly gathered via Google Form Questionnaires. The researcher utilized a sampling method to gather data, selecting a sample size of 50 online gamers from Lower Assam

Major Finding:

The gaming industry in India is growing rapidly and utilizing advanced technologies, but gamers in Assam face challenges and lack support.

Conclusion:

Indian customers are now spending more time and money playing online games because to this expanding trend. With more people using smartphones and making in-app purchases, the Indian online gaming sector is expected to grow, offering developers a profitable opportunity. These days, the Indian online gaming market is expanding each month. Particularly following the pandemic, when youngsters have more free time and even adults have been introduced to this gaming world. Additionally, it has provided chances for business owners to develop new strategies for marketing their goods. There are also new businesses entering this sector, and even investors are investing substantially in them because they have the potential to expand across the nation.

A Study on Legal Compliances in Industrial Units of Nalbari Industrial Estate

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An Investigation of Problems and Prospects of Gaming

Industry in Assam

CHAPTER-1

Introduction

Page | 1

1.1 Introduction

The gaming industry is one of the most exciting industries in tech because of its importance to culture, entertainment, and technological advancement. The term “Entertainment Industry” is no longer reserved for Hollywood/ Bollywood and the movie industry because gaming is now providing one of the most immersive and awe-inspiring forms of entertainment to more than 3 billion players from around the globe. The gaming industry is no longer a niche arena for a certain age group or consumer segment. Gaming has become a viable form of entertainment for players from all backgrounds and ages because of the improvement in mobile gaming and the upgrade in hardware. As technology advances, so does the industry, incorporating cutting-edge graphics, immersive storytelling, and online multiplayer experiences. With a massive and diverse player base gaming industry continues to shape and reflect the cultural landscape, influencing not just how we play, but also how we connect and consume media.

Video gaming in India is an emerging market since India is experiencing strong growth in online gaming, making it one of the top gaming markets in the world. Over the past few decades, the Indian gaming industry has gone from close to non-existent in the 1990s to one of the top markets globally in the late 2010s. In 2019, the online gaming market in India was estimated at Rs. 6,200 crores (USD 780 Million) with an estimated 300 million gamers, a 41.6% increase from 2018. Due to the orders to stay at home during the COVID-19 pandemic, there was an increase in Indian mobile gamers. Downloads of mobile games increased 51% on the Google Play Store and 20% on the iOS App Store between April 2019 and June 2020, when COVID-19 took place.

The gaming industry in India is booming. However, the industry is not without challenges. The gaming industry in Assam faces a set of unique challenges and promising prospects within the local context. One of the notable challenges is the limited technological infrastructure, including access to high-speed internet, which can hinder the growth of online gaming, another significant challenge is that parents always find gaming as a kid's play. Additionally, a lack of specialized educational and training programs for game development may limit the emergence of a skilled workforce in the region. Despite these challenges, there are significant prospects for the gaming industry in Assam. The state has a vibrant and diverse cultural heritage that can be leveraged to create unique gaming content. Furthermore, the rising interest in gaming among the youth presents an opportunity for the establishment of gaming communities and local e-sports events.

1.2. Objectives of the Study:

The study is conducted to:

1. To find out the demand and market size of the gaming industry in Assam.
2. To examine the government measures to regulate online gaming.
3. To know about the financial conditions of gamers of Assam.
4. To find out the problems faced by the gamers of Assam.

1.3. Review of Literature:

The following literature discloses the various studies on the online gaming industry in the recent past in the context of India and Abroad.

Dey, K. (2021) observed that the gaming industry in India is rapidly expanding due to the increased use of smartphones and consoles, as well as cloud penetration. The market is expected to grow further due to the rising per capita income, increased interest in gaming, and the rise of dual-income households. The recent COVID-19 outbreak has led to a surge in users and games downloaded, further contributing to the growth of the gaming industry in India.

Kücklich, J. (2005) found that the digital games industry is a significant part of the creative industries, with revenues comparable to the box office intakes of the Hollywood film industry. The global games market in 2003 was valued at 33.2 billion US dollars. The gaming industry is growing and may exceed the value of the music industry by the end of 2004. Page | 3

Baltezarević, R.V., Baltezarević, B., & Baltezarević, V. (2018) found that the development of technology and the Internet has enabled the emergence of a new kind of game, video games, which are increasingly replacing traditional games. The growing demand for video games has opened a new industrial branch, the gaming industry, which involves creative professionals. The digital game sector remains very strong, even as other media industries suffer decline, representing a rapidly growing business branch.

Zackariasson, P., & Wilson, T.L. (2012) observed that video games are a unique form of entertainment based on meaningful interactions between individuals and machines. The Video Game Industry provides a reference foundation for individuals seriously interested in the industry at the academic level. Video game studies are becoming more accepted and their interpretation is changing.

Lee, J.L. (2011) found that the gaming industry in Taiwan has seen significant growth in recent years, driven by the success of the U.S. gaming industry. The Taiwanese gaming industry has adopted many of the same strategies used by the U.S. gaming industry, such as the use of mobile gaming, virtual reality, and eSports. The Taiwanese government has taken steps to support the gaming industry, such as providing tax incentives and creating a regulatory framework.

Singh, D., & Pillai, S. (2022) observed that digital marketing has revolutionized the gaming industry, making it one of the biggest entertainment industries in the world. Digital marketing strategies have opened up new opportunities for career growth in the gaming industry. Digital marketing has changed the way people view the gaming industry, making it more accessible and attractive to a wider audience.

Santasarkka, S. (2017) found that the games industry influences the economy indirectly since technological and service innovations developed for entertainment games are spilling over into other sectors and non-leisure applications. In the context of his thesis, spill-over is referred to as voluntary and involuntary exchange of useful technological information, new concepts, ideas, and different types of capital. The gaming industry players have strong innovation capabilities, and they act as catalysts for innovation and knowledge-based growth in various other industries, contributing to economic growth across the economy indirectly.

Politowski, C., Petrillo, F., Ullmann, G., & Guéhéneuc, Y. (2021) observed that the game industry suffers from management and production problems in the same proportion and management problems decreased over the years, giving space to business problems, while production problems remained constant. Technical and game design problems have decreased over the years, the latter only after the last decade. The marketing problems are the ones that had the biggest increase over the 23 years compared to other problem types in the gaming industry.

Quwaider, M., Alabed, A., & Duwairi, R. (2019) observed that the great popularity of video games and their ability to make people indulge, the turnout of players to play video games dramatically led to transforming the video game industry from the entertainment side to be involved in most other areas in the life. Examples of these areas are education, entertainment, and promoting social relationships. Some studies find that there is a relationship between video games and the player's behavior.

The above literature reveals that the gaming industry is rapidly expanding in India due to increased smartphone and console use, cloud penetration, rising per capita income, and the COVID-19 outbreak. The global gaming industry is a significant part of the creative industries and is growing rapidly, with the potential to exceed the value of the music industry. The development of technology and the internet has led to the emergence of video games, which are replacing traditional games and creating new opportunities for creative professionals. Video games provide a unique form of entertainment and have become a major industry worldwide. The gaming industry in

Taiwan has seen significant growth, adopting strategies from the U.S. gaming industry and receiving government support. Digital marketing has revolutionized the gaming industry, making it one of the biggest entertainment industries globally and opening new career opportunities. The gaming industry has a significant impact on the economy, spilling over into other sectors and contributing to innovation and knowledge-based growth. The game industry faces management, production, and business problems, with marketing problems experiencing the biggest increase. Video games have become involved in various areas of life, including education, entertainment, and social relationships, with studies exploring the relationship between video games and player behavior.

1.4. Significance of the Study:

The study aims to raise awareness about the growing Gaming Industry in Assam by examining its current state and potential for further growth. It seeks to shed light on the financial conditions of gamers in the region, exploring the challenges they face in earning a sustainable income from gaming. One of the key issues identified is the lack of parental support, which often hinders gamers from pursuing their passion and turning it into a viable career option.

By investigating the financial aspects of the gaming industry in Assam, the study aims to highlight the economic potential it holds for both individuals and the region. It will analyze the various revenue streams available to gamers, such as sponsorships, streaming platforms, and tournament winnings, and assess their viability in the local context. Additionally, the study will examine the existing infrastructure and support systems available to gamers, identifying gaps that need to be addressed to foster a thriving gaming ecosystem.

Furthermore, the study aims to provide a model that can be applied in different contexts in the future. By analyzing the challenges faced by gamers in Assam, it seeks to identify strategies and interventions that can be implemented to overcome these obstacles. This model will serve as a blueprint for other regions or countries looking to develop their gaming industries and support aspiring gamers.

Overall, the study aims to create awareness about the potential of the gaming industry in Assam, shed light on the financial conditions and problems faced by gamers, particularly the lack of parental support, and provide a replicable model that can be adapted and implemented in different contexts to foster the growth of the gaming industry and support aspiring gamers.

Thus, the study is very significant for the reasons mentioned below:

1. This study is designed to make society aware of the growing Gaming Industry in Assam.
2. This study highlights the financial conditions as well as some problems faced by the gamers of Assam.
3. One of the key issues faced by the gamers of Assam is lack of parental support which will be thoroughly discussed in this study.
4. The study will help researchers/students who can use the same model in different contexts in the coming days.

1.5. Limitations of the Study:

The study is limited by the lack of awareness about gaming culture, which may result in a lack of understanding of the shades and intricacies of the gaming community. This lack of awareness may lead to biased or incomplete findings, as researchers may not fully comprehend the context in which gamers operate.

Difficulties in collecting data from gamers in different regions pose a limitation to the study. Gaming preferences, behaviors, and attitudes may vary significantly across different geographical locations, making it challenging to generalize findings from a specific region to a broader population. This limitation may restrict the study's ability to provide a comprehensive understanding of the gaming landscape.

Furthermore, the focus of the study on a specific region further limits its generalizability. Assam is a diverse State with various cultural, social, and economic factors that can influence gaming patterns and behaviors. By solely examining a specific

region, the study may overlook important variations and trends that exist in other parts of the country.

Lastly, the narrow scope of the study, which only includes the video game industry, restricts the examination of gaming culture to a specific medium. Gaming culture extends beyond video games and encompasses various forms of gaming, such as board games, card games, and role-playing games. By excluding these other forms of gaming, the study may fail to capture a holistic understanding of gaming culture and its impact on society.

In conclusion, the limitations of the study, including the lack of awareness about gaming culture, difficulties in collecting data from gamers in different regions, a focus on a specific region in Assam, and a narrow scope that only includes the video game industry, may hinder its ability to provide a comprehensive and representative analysis of gaming culture.

Thus, the study is subject to the following limitations:

1. As most people are not aware of the gaming culture it causes a major hindrance.
2. Connecting and communicating with different gamers from different parts of the state for data collection was a major problem.
3. The empirical data collection focuses on the region of Lower Assam Districts, which excludes larger game studios found in for example Ahmedabad, Gujarat.
4. Finally, while the contents of this thesis could potentially be generalized to a wider context concerning all areas of software development, the author has decided to only include the video game industry in specific terms. The literature study and empirical data collection was limited to this area and therefore any parallels drawn to other parts of the industry might not be as easily justifiable.

1.6. Data and Methodology:

The study conducted is analytical, aiming to analyze and understand certain aspects of online gaming. The researcher utilized a sampling method to gather data, selecting a sample size of 50 online gamers from Lower Assam. This sample size was chosen to represent the online gaming population in that specific region.

To collect the necessary data, a Google Questionnaire was employed. This online survey allowed the researcher to gather information from the participants regarding their gaming habits, preferences, and experiences. The questionnaire was designed to cover various aspects of online gaming, such as the frequency of gameplay, preferred game genres, and the impact of gaming on mental health.

Once the data collection phase was completed, the researcher proceeded to analyze the gathered information. In this study, the non-parametric Friedman Test was chosen as the statistical analysis method. This test is commonly used when analyzing data from multiple related groups or conditions. It allows for the comparison of variables across different conditions without assuming a normal distribution of the data.

By utilizing the Friedman Test, the researcher tried to examine the relationships and differences between various aspects of online gaming within the sample population. This statistical analysis method provided valuable insights into the preferences, habits, and experiences of online gamers from Lower Assam. The following table summarizes the methodology of the study:

| | |
|---------------------------------------|--|
| Nature Of the Study: | Analytical |
| The Study Is Based On: | Sampling |
| Sample Size: | 50 |
| Target Population: | Online Gamers |
| Study Area: | Lower Assam |
| Secondary Data: | Journals, Reports, Online Resources, Relevant Acts |
| Primary Data: | From The Online Gamers |
| Method Of Collection Of Primary Data: | Applying Google Questionnaire |
| Sampling Technique: | Simple Random Sampling |
| Statistical Tools Used: | Non-Parametric Test (Friedman Test) |

1.7. Chapter Plan:

The Report is based on the following chapter plan:

| | |
|-----------|--|
| Chapter-1 | Introduction |
| Chapter-2 | Regulation of the Gaming Industry in India |
| Chapter-3 | India's Response to the Gaming Industry |
| Chapter-4 | Data Analysis, Findings and Conclusions |

Chapter-2

Regulation of the Gaming Industry in India

2.1. Introduction:

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The Information Technology (Intermediary Guidelines and Digital Media Ethics Code) Amendment Rules 2023, which is an amendment to the Information Technology (Intermediary Guidelines and Digital Media Ethics Code) Amendment Rules 2021, has introduced more stringent provisions relating to the intermediaries operating in the online gaming sector. The IT Rules 2023 aims to address the complexities associated with the online gaming industry and provides better ways and channels for effectively combating issues like fraud and addiction. The IT Rules, 2021 was introduced in response to section 87 of the Information Technology Act, 2000. This amendment was critical to regulating the online gaming sector in India. The IT Rules, 2021 combined the draft Intermediaries Rules, 2018 and the OTT Regulation and Code of Ethics for Digital Media, and the IT Rules 2023 has further refined it.

The IT Rules 2023 has brought in several key amendments to efficiently regulate the online gaming industry in India. These amendments include the introduction of a grievance redressal mechanism, a code of ethics for online gaming intermediaries, and provisions for ensuring the protection of user data. The new rules require online gaming companies to appoint a grievance officer, a nodal officer, and a chief compliance officer to ensure that users' complaints are resolved quickly and efficiently. The code of ethics for online gaming intermediaries requires them to ensure that their platforms do not promote violence, hatred, or discrimination. They must also ensure that their platforms do not cause harm to minors, and they must take measures to prevent addiction. Additionally, the IT Rules 2023 mandates that online gaming companies must obtain user consent before collecting and processing their data.

Overall, the IT Rules 2023 has introduced several provisions aimed at regulating the online gaming industry in India more effectively while also ensuring the protection of users' interests.

2.2. Definition of Online Gaming under IT Rules 2023:

The Act contains definitions of various terms related to online gaming and publishing. It defines an "online game" as a game that is accessible through the internet and played on a computer resource or an intermediary.

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An "online gaming intermediary" is any entity that enables users to access online games through its computer resources. An "online gaming self-regulatory body" is an entity designated as such under rule 4A.¹

An "online real money game" is where a user deposits cash or kind with the expectation of earning winnings on that deposit. The term "winnings" refers to any prize, in cash or kind, which is distributed or intended to be distributed to a user of an online game based on their performance and following the rules of the game.

A "permissible online game" is a permissible online real money game or any other online game that is not an online real money game. A "permissible online real money game" is an online real money game verified by an online gaming self-regulatory body under rule 4A.²

The text also defines a "person" as defined in sub-section (31) of section 2 of the Income Tax Act, 1961 (43 of 1961).

A "publisher" is defined as a publisher of news and current affairs content or a publisher of online curated content. A "publisher of news and current affairs content" is an online paper, news portal, news aggregator, news agency, or any other entity that is functionally like a publisher of news and current affairs content. However, it does not include newspapers, replica e-papers of the newspaper, or any individual or user who is not transmitting content during systematic business, professional, or commercial activity. A "publisher of online curated content" is a publisher who plays a significant role in determining the online curated content being made available to users. Such a publisher makes available to users a computer resource that enables them to access online curated content over the internet or computer networks. It also includes any other

¹Under Rule 2 of IT Rules 2023

²Under Rule 2 of IT Rules 2023

entity that is functionally like publishers of online curated content but does not include any individual or user who is not transmitting online curated content in the course of systematic business, professional, or commercial activity.³

‘Grievance Officer’ means an officer appointed by the intermediary or the 1 [online gaming self-regulatory body or the] publisher for these rules.⁴

2.3. Intermediaries Include social media, Online Gaming, And Significant social media:

Intermediaries, which include social media, online gaming, and significant social media intermediaries, have certain duties to ensure that their services are used responsibly. They must follow the rules and regulations set out by the government and must take measures to prevent users from violating these rules.⁵

2.4. Measures To Prevent Users:

These measures include publishing the rules and regulations, privacy policy, and user agreement on their website or mobile application in a language that users can understand. They must also inform users of these rules and regulations in the user's preferred language. Intermediaries must make reasonable efforts to prevent users from hosting, displaying, uploading, modifying, publishing, transmitting, storing, updating, or sharing any information that violates the law or is harmful to others.⁶

2.5. Intermediaries Must Communicate Their Users At Least Once A Year:

Intermediaries must inform their users at least once a year that they have the right to terminate their access to the service if they do not comply with the rules and regulations. If an intermediary receives an order from a court of competent jurisdiction or is notified by the government, it must remove any unlawful information on its platform.⁷

³Under Rule 2 of IT Rules 2023

⁴ Under Rule 2 of IT Rules 2023

⁵ Under Rule 3 of IT Rules 2023

⁶ Under Rule 3 of IT Rules 2023

⁷ Under Rule 3 of IT Rules 2023

2.6. Hosting, Storing, Or Publishing Any Information Are Prohibited:

Intermediaries must not host, store, or publish any information that is prohibited under the law. This includes information that is detrimental to the sovereignty and integrity of India, security of the state, friendly relations with foreign states, public order, decency or morality, contempt of court, defamation, or incitement to an offence.⁸

2.7. Social Media and Online Gaming Platforms to Ensure Compliance with The Law:

Social media and online gaming platforms that enable users to access real money games need to follow additional due diligence rules to ensure compliance with the law. These platforms need to appoint a Chief Compliance Officer, a nodal contact person for coordination with law enforcement agencies, and a Resident Grievance Officer. They must also publish a monthly compliance report detailing complaints received and actions taken. The report must include the number of communication links or information parts that the platform has removed or disabled access to in response to proactive monitoring using automated tools or other relevant information specified.⁹

2.8. Identification And Verification the User's Identity:

Before an online gaming platform can accept any deposit in cash or kind from a user for a permissible online real-money game, it must identify and verify the user's identity. The process for customer identification and verification required by entities regulated by the Reserve Bank of India at the beginning of an account-based relationship also applies to the identification and verification of users of such platforms. Moreover, online gaming platforms that enable users to access any permissible online real-money game cannot finance the game by way of credit or allow third parties to provide financing for playing such games.¹⁰

2.9. Choice of Self-Regulatory Bodies by the Ministry:

⁸ Under Rule 3 of IT Rules 2023

⁹ Under Rule 4 of IT Rules 2023

¹⁰ Under Rule 4A of IT Rules 2023

The Ministry has the authority to choose online gaming self-regulatory bodies that can verify if an online game is legitimate for real money, according to these rules. Companies that meet the following requirements can apply to the Ministry to become self-regulatory bodies: a company registered under section 8 of the Companies Act, 2013; its members represent the online gaming industry; its members promote online games responsibly; its Board of Directors is comprised of reputable individuals without any conflict of interest and has suitable knowledge or experience for the functions of the self-regulatory body. The Board of Directors includes an individual with special knowledge or experience in the online gaming industry, someone with experience in promoting the interests of online game users, an educationist, an expert in psychology or mental health, or another relevant field, an individual with special knowledge or experience in information and communication technology, an individual who is or has been a member or officer of an organization dealing with the protection of child rights, an individual with practical experience in public policy, public administration, law enforcement, public finance or another relevant field, nominated by the Ministry, and such other individuals as may be appointed with the previous approval of the Ministry.¹¹

2.10. Maintenance Of an Updated List of All Online Real Money Games:

An online gaming regulatory body must maintain an updated list of all online real money games that are allowed to be played on its website or mobile-based application. This list should contain details such as the name of the online game, the applicant's information, the dates of validity of the verification, the reasons for the verification, and any suspension or revocation of verification.

2.11. Keeping An Updated List of Its Members:

The regulatory body must also keep an updated list of its members, including their corporate or business-related identity numbers and details of any suspension or revocation of membership.

2.12. Suspension and Revocation of the Verification:

¹¹ Under Rule 4A of IT Rules 2023

The regulatory body can suspend or revoke the verification of any online real money game if it finds that the game is not in compliance with the rules.

Any online real money game that has been verified by the regulatory body must display a visible mark of verification on its website or mobile-based application. If the Ministry deems it necessary, it may ask the regulatory body to provide information or disclose details on its website or mobile-based application.

2.13. Details Of an Online Gaming Regulatory Body:

Before issuing a direction under section 69A of the Act in respect of a permissible online real money game, the Central Government may take into consideration the details published by an online gaming regulatory body.

2.14. Framework For Grievance Redressal:

The regulatory body must publish its framework for grievance redressal on its website or mobile-based application, along with the contact details of the Grievance Officer. Applicants who are aggrieved by the regulatory body's decision for verification may make a complaint in respect of any matter related to the online real money game or verification.

2.15. Rectification of the Details:

If the Ministry finds that the verification of a permissible online real money game by the regulatory body does not conform to the rules, it may direct the regulatory body to take measures to rectify the same. If the Ministry is satisfied that it is necessary, it may suspend or revoke the regulatory body's designation, after allowing the regulatory body to be heard.¹²

2.16. Central Government's Direction to Observe of Certain Obligations for An Online Game:

The government may issue a notification in the Official Gazette, directing online gaming intermediaries to follow certain obligations for an online game. This applies if

¹² Under Rule 4A of IT Rules 2023

the government believes it is necessary for the interest of India's sovereignty, security, friendly relations with foreign states, public order, or preventing user harm. The obligations that the intermediaries must follow are similar to those for online real money games. The government will specify the duration within which the online gaming intermediary should follow these obligations.

If an online game is notified under this rule, then the provisions of rule 4A shall apply as they apply to a permissible online real money game.

2.17. Publication Of a Clear and Concise Statement on Its Website and Mobile Application:

In addition to following rules 3 and 4, an intermediary must publish a clear and concise statement on its website and mobile application. This statement will inform publishers of news and current affairs content that they must give details of their user accounts on the intermediary's services to the Ministry as per rule 18.

The Ministry of Information and Broadcasting will administer this rule. The intermediary may provide publishers who have given information under rule 18 with a demonstrable and visible mark of verification as being publishers. This mark will be visible to all users of the service.¹³

2.18. No Websites or Apps Shall Go Against India's Sovereignty, Security, Foreign Relations, Or Public Order:

If a website or app allows users to share information that could pose a threat to India's sovereignty, security, foreign relations, or public order, the Ministry can require the website or app to follow certain rules. This applies to websites or apps that are not considered significant social media intermediaries. The Ministry will assess whether a website or app poses a risk based on whether users can interact with each other and whether the information being shared would be widely disseminated. If necessary, the Ministry may issue an order related to a specific part of the website or app that acts as an intermediary.¹⁴

¹³ Under Rule 5 of IT Rule 2023.

¹⁴ Under Rule 6 of IT Rules 2023

2.19. Consequences of Failure to Comply with the Rules:

If an intermediary fails to comply with the rules outlined in this document, the protections afforded by subsection (1) of section 79 of the Act will not apply to said intermediary. As a result, the intermediary may be subject to penalties under any relevant law currently in effect, including but not limited to, the provisions of the Act and the Indian Penal Code.¹⁵

2.20. Code of Ethics at Various Levels:

As per rule 9, any publisher mentioned in rule 8 must comply with the Code of Ethics stated in the Appendix attached to these rules. In case of any violation of the law that is currently in force, the publisher will be held accountable for the actions that follow the contravention. To ensure compliance with the Code of Ethics and to address the grievances made against publishers in India, a three-tier structure has been put in place. The three tiers include self-regulation by publishers at Level I, self-regulation by self-regulating bodies of publishers at Level II, and oversight mechanism by the Central Government at Level III.¹⁶

2.21. First Level of Self-Regulation:

This section discusses the self-regulating mechanism for publishers. According to the mechanism, the publisher will be the first level of self-regulation. They must establish a grievance redressal mechanism and appoint a Grievance Officer in India, who will be responsible for addressing grievances received by them. The publisher must display the contact details of the Grievance Officer and the grievance redressal mechanism on their website or interface. Additionally, the Grievance Officer must address every received grievance within fifteen days and communicate the same to the complainant.¹⁷

2.22. Second Level of Self-Regulation:

Self-regulating bodies of publishers may exist, which are independent bodies constituted by publishers or their associations. The self-regulating body will be headed

¹⁵ Under Rule 7 of IT Rules 2023

¹⁶ Under Rule 8 of IT

¹⁷ Under Rule 11 of IT Rules 2023

by a retired judge from the Supreme Court or High Court or an independent eminent person from the field of media, broadcasting, entertainment, child rights, human rights, or other relevant fields. The self-regulating body must register with the Ministry within thirty days of its constitution.¹⁸

2.23. Third Level of Self-Regulation:

The Ministry will develop an Oversight Mechanism to facilitate adherence to the Code of Ethics by publishers and self-regulating bodies. It will publish a charter for self-regulating bodies, including Codes of Practice for such bodies. The Ministry will establish an Inter-Departmental Committee for hearing grievances. It will refer to the Inter-Departmental Committee grievances arising out of the decision of the self-regulating body or where no decision has been taken by the self-regulating body within the specified period. The Ministry will also issue appropriate guidance and advisories to publishers and issue orders and directions to publishers for maintenance and adherence to the Code of Ethics. An officer of the Ministry not below the rank of a Joint Secretary to the Government of India will be appointed as the "Authorized Officer" to issue directions.¹⁹

2.24. Major Observations:

1. Intermediaries like social media, online gaming, and significant social media must ensure their services are used responsibly and follow government rules. They must prevent users from violating these rules by publishing them in a language users can understand.
2. Intermediaries must avoid hosting, storing, or publishing prohibited information and inform users of their right to terminate access if they do not comply. Additionally, online gaming platforms must identify and verify user identity before accepting deposits for real-money games.
3. The Ministry can select self-regulatory bodies for verifying the legitimacy of real money online games. Companies meeting specific requirements can apply, which include being registered under the Companies Act, of 2013, promoting

¹⁸ Under Rule 12 of IT Rules 2023

¹⁹ Under Rule 13 of IT Rules 2023

online games responsibly, having a Board of reputable individuals without conflict of interest, and including members with relevant expertise.

4. The regulatory body must maintain an updated list of all verified online games and its members.
5. The regulatory body can suspend or revoke the verification of any online real money game if it finds that the game is not in compliance with the rules. Any verified online real money game must display a visible mark of verification. The Central Government may take into consideration the details published by an online gaming regulatory body before issuing a direction.
6. The regulatory body must publish its framework for grievance redressal on its website or mobile-based application. The Ministry may direct the regulatory body to take measures to rectify the verification of an online real money game. The government may issue a notification in the Official Gazette, directing online gaming intermediaries to follow certain obligations for an online game.
7. Intermediaries must publish a statement on their website and app informing publishers to provide user details to the Ministry (rule 18). The Ministry will administer this rule and may issue an order to websites or apps that threaten India's sovereignty, security, foreign relations, or public order. Non-compliance with these rules can result in penalties under the Indian Penal Code.
8. The Code of Ethics for publishers in India has a three-tier structure for ensuring compliance and addressing grievances.
9. The first level requires publishers to establish a grievance redressal mechanism and appoint a Grievance Officer.
10. The second level involves self-regulating bodies of publishers, headed by a retired judge or eminent person.
11. The Ministry oversees the third level, which includes an Inter-Departmental Committee to hear grievances and issue guidance and directions to publishers.

2.25. An Overview of The Online Gaming (Regulation) Bill, 2022:

Important Definitions under the Act:

This Act defines terms used in Online Gaming. "Online Gaming" means games played on electronic devices like Personal Computers, Mobile Phones, Tablets, and more. The "Online Gaming Server" is a mainframe computer or set of computers installed and managed by the Licensee that processes stores, and verifies transactions arising from Online Gaming, and manages, monitors, and controls the entire Online Gaming system. The "Online Gaming Website" is the internet domain registration or URL address of the Licensee where Online Sports Gaming is conducted. A "player" is someone who participates in any online game as certified by the Commission. "Prescribed" means prescribed by rules made under this Act.

The "appropriate authority" refers to a person or organization assigned by the Central Government. The "Commission" is the Online Gaming Commission established under section 3. The "license" is a license granted by the Commission to enable Online Gaming. The "licensee" is any person who has been given a license to install and operate Online Gaming Server, or any other activity related to Online Gaming.²⁰

2.26. Constitution of Online Gaming Commission:

The Online Gaming Commission will be constituted by the Central Government to regulate online gaming. It will have a Chairperson, Vice-Chairperson, and five members nominated by the Central Government, with at least one expert from the field of law, one expert from the field of cyber technology, and one person with experience in law enforcement. The Chairperson, Vice-Chairperson, and every member of the Commission will hold office for three years. They may resign from their office by writing to the Central Government.²¹

2.27. Ambit of Online Gaming:

Online gaming can only be done through an online gaming website. No one can operate an online gaming server or an online gaming website without a license granted under

²⁰ Sec.2, The Online Gaming (Regulation) Bill, 2022

²¹ Sec. 3(1), The Online Gaming (Regulation) Bill, 2022

this Act. Anyone who operates an online gaming server or website without a license will be punished with imprisonment for a term not exceeding three years and with such fine as may be prescribed.²²

2.28. License for an Online Gaming Server:

To obtain a license, one must make an application in writing to the Commission. The Commission may either grant or refuse to grant the license based on their inquiry and will assign reasons for its decision in writing.²³

2.29. Cancellation Or Surrender of the License:

A license will remain in force for a period of up to six years unless it is cancelled or surrendered. If a licensee breaches any of the conditions of their license, such as the rules governing the conduct of online gaming, they shall be punished with a prescribed fine. The licensee shall exhibit the conditions subject to which the license was granted and all rules governing the conduct of online gaming on the approved website.²⁴

2.30. Punishment For Breach of Conditions of The Licensee by Players:

Section 13 of the Online Gaming regulations states that anyone who engages in online gaming through a website that is not the licensee and violates any of the license conditions or rules governing the game will be subject to punishment in the form of a prescribed fine. The licensee is responsible for displaying the conditions under which the license was granted and all the rules governing the conduct of online gaming on the approved website.²⁵

2.31. Rule-Making Power of The Commission:

The Commission can make rules for carrying out the purposes of this Act, in consultation with the Central Government. These rules may provide for matters such as the form and manner of making an application for a license, fees, age and other conditions of participants, maintenance of accounts relating to online gaming,

²² Sec. 5(1), 5(2), The Online Gaming (Regulation) Bill, 2022

²³ Sec. 6(2), The Online Gaming (Regulation) Bill, 2022

²⁴ Sec. 7(1), The Online Gaming (Regulation) Bill, 2022

²⁵ Sec. 13(1), The Online Gaming (Regulation) Bill, 2022

restrictions, or conditions about admission of participants and fees, types of notices to be exhibited, restrictions or conditions about credit facilities provided by the licensee to participants of online gaming, and fines for violating provisions under Chapter II of the Act. Any other matter required to be or may be prescribed can also be included.²⁶

2.32. Conclusion:

The Online Gaming (Regulation) Bill, of 2022 defines terms used in online gaming and establishes the Online Gaming Commission to regulate it. Online gaming can only be done through a licensed gaming website and server. Anyone operating without a license will be punished. License can be obtained by application to the Commission. The licensee must exhibit all rules governing the conduct of online gaming on the approved website. The Commission can make rules for carrying out the purposes of this Act.

²⁶ Sec. 18(1), The Online Gaming (Regulation) Bill, 2022

CHAPTER-3

India's Response to the Gaming Industry

3.1. Introduction:

Due to the nation's sizable young population and its proficiency with cutting-edge technologies, the Indian gaming industry has enormous potential for growth and innovation. New opportunities for the industry to thrive are presented by the emergence of Gen Z and new technologies like AR, VR, and cloud gaming. It is crucial for all parties involved, including the government and industry players, to collaborate and responsibly develop the gaming ecosystem in India in order to fully realize this potential. By doing this, we can take advantage of the gaming industry's potential to advance India's creative economy and meet global economic objectives while giving young people the chance to interact with technology, acquire new skills, and launch successful careers.

The gaming industry is an important contributor to India's GDP growth. The industry includes mobile gaming, console gaming, and computer gaming. Growth in the country's gaming industry is being fuelled by improving demand and supply scenarios. Major demand drivers include the rising inclination of Indian customers towards gaming, the growing youth population base, rising per capita expenditure, etc. On the other hand, the deployment of the latest technologies, implementation of government policies for the welfare of the gaming industry, etc., are the major supply-side drivers for the sector. Various government initiatives boosting growth in the country's gaming industry include IPC, Indecent Representation of Women (Prohibition) Act, Nagaland Prohibition of Gambling and Promotion and Regulation of Online Games of Skill Bill, FDI Policy, etc.

3.2. India Gaming Industry Outlook:

In the past, gaming did not gain a strong foothold in India due to its low social acceptance as well as the lack of access to PCs and gaming consoles in the country. However, India's economic growth has resulted in a scenario that is embracing entertainment and digital content, driven by the growing penetration of the Internet and smartphones. India's gaming industry was valued at USD 543.08 million in 2016 and is projected to grow at a CAGR of 6.61%, in value terms, over the next five years. The gaming industry in India has grown rapidly over the last decade, predominantly on the back of increasing smartphone and internet penetration coupled with rising income levels of consumers in the country.

In 2016, India accounted for a share of 0.55% of the global gaming industry and this is anticipated to grow significantly over the next 5 years, on account of macroeconomic factors such as improving demographics, rising disposable income, changing gaming preferences of the consumers, etc.²⁷ Moreover, the increasing focus of gaming companies on Augmented Reality (AR) and Virtual Reality (VR) related games in the country is expected to boost India's gaming market in the coming five years.

3.3. Internet Users in India:

As of January 2023, India had 692.0 million internet users. In India, 48.7% of people had access to the internet as of the beginning of 2023. An analysis shows that between 2022 and 2023, the number of internet users in India remained constant. In order to put things into perspective, these user statistics show that 730.0 million Indians were not online at the beginning of 2023, indicating that 51.3% of the country's population was not online.²⁸

3.4. India's Mobile Phone Penetration in 2023

At the beginning of 2023, India had 1.10 billion mobile connections. It should be noted that many people use more than one mobile connection around the world. For instance,

²⁷ Emerging Trends India Gaming Industry, Confederation of Indian Industry

²⁸<https://datareportal.com/reports/digital-2023-india>

they might have one connection for personal use and another for work. As a result, it is common for mobile connection numbers to significantly outperform population numbers. According to data from GSMA Intelligence, there were 77.0 percent more mobile connections in India than there were people in the country in January 2023. In India, there were 22 million fewer mobile connections (-1.9%) between 2022 and 2023.²⁹

Percentage of Active Mobile Users in India

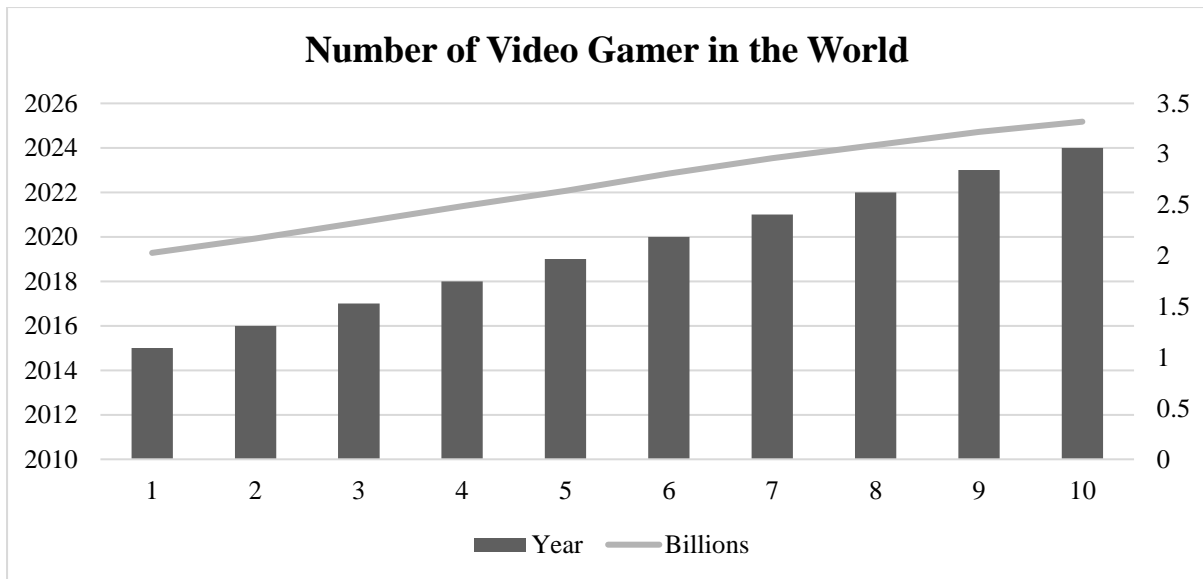
| | Rural | Urban | India |
|--------|-------|-------|-------|
| Male | 54 | 57 | 60 |
| Female | 34 | 71 | 42 |

Source: <https://www.grabon.in/indulge/tech/internet-users-statistics/>

3.5. Video Gaming has triggered the Gaming Industry:

The gaming market in India has been growing as more and more people are playing video games. Although India's video game industry is not as developed as China's or South Korea's, foreign game developers like Ubisoft and Microsoft Games have started operations in India. Additionally, local gaming studios are expanding rapidly. Currently, there are around 500 game studios in India, an increase from 15 in 2009. Moreover, India has about 600,000 e-sports players and 100,000 e-sports teams. Popular games like PUBG and Fortnite have contributed to the growth of the gaming industry in India. For instance, PUBG had over 50 million active users each month, with India accounting for 25% of the total downloads. Indian games such as Ludo King, Dream 11, and MPL have also been downloaded by more than 100 million people.

²⁹<https://datareportal.com/reports/digital-2023-india>



Source: <https://truelist.co/blog/gaming-statistics>

3.6. Impact of New Technology on the Gaming Industry:

The gaming sector in India is changing with the adoption of modern technologies such as 3D designs, VR/AR, and AI. As a result, games are becoming more realistic and colourful. AR technology is changing the way people play mobile phone games by providing real-life side effects like music and images. The exponential expansion of the gaming industry in India is playing a critical role in quickly expanding the breadth of the entire gaming culture.

3.7. The Number of Smartphone Users is Rapidly Increasing:

The Indian gaming market is expected to grow rapidly due to the increasing number of smartphone users. Activision Blizzard and Electronic Arts, well-known publishers of console and PC games, are placing greater emphasis on mobile gaming. They are competing with companies like Tencent, Sea, and Perfect World, which are predominantly involved in mobile gaming. Social media sites like ByteDance and AppLovin are now performing mobile game publishing. In total downloads this year, India overtook China as the primary consumer of mobile games. This year, Samsung planned to move part of its smartphone manufacturing to India from other countries. In addition, 5G networks are

expected to support the growth of mobile-based cloud gaming services and augmented reality (AR) games.

Chapter-4

Data Analysis, Findings and Conclusions:

4.1 Introduction:

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A survey was conducted to collect data on the gaming habits and preferences of a group of individuals. The purpose of the survey was to gather information on the gender distribution of the participants, the duration of their video gaming sessions, the gaming equipment they used, the devices they played on, the profession they aspired to in the gaming industry, and their interest in pursuing a career in gaming.

The survey mentioned in the previous text was conducted to gather data on the gaming habits and preferences of a group of 50 individuals. The survey was designed to collect information on the gender distribution of the participants, the duration of their video gaming sessions, the gaming equipment they used, the devices they played on, the profession they aspired to in the gaming industry, and their interest in making gaming their career.

4.2 Analysis of Data:

The survey found that out of the 50 participants, 44 were male and 6 were female. The majority of the participants, 32%, played games for approximately 2 hours, while 34% played for about 4 hours. Only 14% of the participants played for around 8 hours, and 20% played for approximately 12 hours. Detailed information are mentioned in the Table 4.1 and 4.2.

Table-4.1

Gender of the Gamers:

| Gender | Male | Female | Total |
|------------|------|--------|-------|
| Total | 44 | 6 | 50 |
| Percentage | 88 | 12 | 100 |

Source: Primary Data

Table-4.2**Duration of Video Gaming:**

| Duration | No. of Participants | Percentage of Participants | Page 29 |
|-----------|---------------------|----------------------------|-----------|
| ±2 Hours | 16 | 32 | |
| ±4 Hours | 17 | 34 | |
| ±8 hours | 7 | 14 | |
| ±12 Hours | 10 | 20 | |
| Total | 50 | 100 | |

Source: Primary Data

The survey also collected data on the gaming equipment the participants used. The most commonly used gaming equipment was gaming keyboards/mice, with 3 respondents using them. 5 respondents used gaming headphones, and 1 respondent used gaming headphones, a gaming monitor, and a gaming processor. Additionally, 21 respondents used a graphics card, gaming processor, gaming keyboard/mouse, and gaming monitor.

When it came to devices used, 62% of the participants used a PC/laptop to play games, while 36% used a mobile device. Only 2% used a console. Tables 4.3 and 4.4 reveal detailed information relating to gaming equipment and gaming devices.

Having proper gaming equipment is significant. Gaming equipment includes a Gaming Console, gaming PC, Gaming Keyboard and Mouse, Gaming Headset, Gaming Monitor, Game Controller, Gaming Chair, etc. Having proper gaming results in benefits of Improved Performance, Better Gaming Experience, Reduced Risk of Injury, and Longer Lifespan of Equipment. 21 participants in the study seem to have sufficient and proper gaming types of equipment as the study reveals.

Table-4.3**Gaming Equipment:**

| Sl. No | Equipment | No. of Respondents | Page 30 |
|--------|--|--------------------|-----------|
| 1 | Gaming Headphones | 5 | |
| 2 | Gaming Headphones; Gaming Monitor | 1 | |
| 3 | Gaming Keyboard/Mouse | 3 | |
| 4 | Gaming Keyboard/Mouse; Gaming Headphones | 1 | |
| 5 | Gaming Keyboard/Mouse; Gaming Headphones; Gaming Monitor | 1 | |
| 6 | Gaming Monitor | 1 | |
| 7 | Gaming processor | 1 | |
| 8 | Gaming processor; Gaming Headphones | 1 | |
| 9 | Gaming processor; Gaming Keyboard/Mouse | 1 | |
| 10 | Gaming processor; Gaming Keyboard/Mouse; Gaming Headphones | 1 | |
| 11 | Graphics Card; Gaming Keyboard/Mouse; Gaming Chair | 1 | |
| 12 | Graphics Card; Gaming Keyboard/Mouse; Gaming Headphones | 1 | |
| 13 | Graphics Card; Gaming processor; Gaming Keyboard/Mouse | 1 | |
| 14 | Graphics Card; Gaming processor; Gaming Keyboard/Mouse; Gaming Monitor | 21 | |
| 15 | Graphics Card; Gaming processor; Gaming Monitor | 1 | |

Source: Primary Data

In terms of career aspirations in the gaming industry, 20% of the participants did not respond, while 18% aspired to become animators, 16% to become game critics, 26% to become game testers, and 20% to become video game designers.

Table-4.4**Devices the Gamers Were Using:**

| Devices | No. o Respondents | Percentage |
|-----------|-------------------|------------|
| Console | 1 | 2 |
| Mobile | 18 | 36 |
| PC/Laptop | 31 | 62 |

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*Source: Primary Data***Table-4.5****Profession the Gamers Went for in the Gaming Industry:**

| Profession | Total | Percentage |
|---------------------|-------|------------|
| Animator | 9 | 18 |
| Game Critic | 8 | 16 |
| Game Tester | 13 | 26 |
| Video Game Designer | 10 | 20 |
| No Response | 10 | 20 |
| | 50 | 100 |

Source: Primary Data

Finally, 54% of the participants were interested in making gaming their career, while 46% were not.

Table-4.6**Gaming as Career:**

| Response | No. of Participants | Percentage |
|----------|---------------------|------------|
| No | 23 | 46 |
| Yes | 27 | 54 |

Source: Primary Data

Table-4.7**Gaming Professionalism**

| Response | No. of Participants | Percentage |
|----------|---------------------|------------|
| No | 48 | 96 |
| Yes | 2 | 4 |

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Source: Primary Data

The survey also recorded responses from individuals regarding their interest and participation in gaming tournaments. Out of the total participants, 48% answered negatively when asked if they were professional gamers, while 2% claimed to be professionals. When asked if they had participated in any tournaments, 50% answered affirmatively, with responses ranging from local mini-tournaments for mobile games like PUBG and Mini-Militia to official Fortnite tournaments.

Table-4.8**Participation in Gaming Tournaments**

| | No. of Responses | Percentage |
|---|------------------|------------|
| Multiple Mini-Militia and PUBG Mobile local tournaments | 1 | 2 |
| BGIS TOURNAMENT | 1 | 2 |
| Bsgahbac | 1 | 2 |
| FFIC | 1 | 2 |
| Many PUBG(BMI) | 1 | 2 |
| Yes | 29 | 58 |
| BGMI mobile | 1 | 2 |
| Fortnite Tournament | 1 | 2 |
| PUBG Mobile | 1 | 2 |
| No Response | 14 | 28 |
| | 50 | 100 |

Source: Primary Data

When asked about their specific gaming interests, Fortnite emerged as the most popular game at 26%, followed by BGMI at 14%. 68% of participants said that they were aware of gaming tournaments happening in India or abroad, while 32% were either unaware or chose not to respond.

Table-4.9
Games of Interests

| Games of Interest | No. of Participants | Percentage |
|--------------------------------------|---------------------|------------|
| BGMI | 7 | 14 |
| COD Warzone;BGMI | 7 | 14 |
| Fortnite | 13 | 26 |
| Free Fire | 5 | 10 |
| Genshin Impact;Others | 1 | 2 |
| Mobile Legends;Genshin Impact;Others | 1 | 2 |
| Others | 8 | 16 |
| Valorant;BGMI | 5 | 10 |
| | 50 | 100 |

Source: Primary Data

12% of participants confirmed the presence of gaming cafes or malls in their localities, while 58% stated that their locality had stores that sold gaming equipment. Finally, only 10% of participants said that they earned from their gaming. The survey provided valuable insights into the gaming habits and preferences of the participants and shed light on their aspirations and interests in the gaming industry career.

Table-4.10

Awareness About the Gaming Tournaments Happening in India Or Abroad

| Awareness About the Gaming | No. of Participants | %age |
|----------------------------|---------------------|------|
| Yes | 34 | 68 |
| No response | 2 | 4 |
| No | 14 | 28 |
| Total | 50 | 100 |

Source: Primary Data

The following table provides information on the distribution of participants and percentages for various tournaments and prizes, with the key takeaway being that the majority of participants (64%) did not win any prizes.

Table-4.11
Award of Prize in Tournaments

| Award of Prize in Tournaments | No. of Participants | %age |
|--|------------------------|------|
| Valorant, PUBG | 1 | 2 |
| TechXetra Mini-Militia award in both solo and team tournaments | 2 | 4 |
| Gamingheadphones | 3 | 6 |
| Fortnite Tournament | 1 | 2 |
| BGMI | 5 | 10 |
| Yes | 6 | 12 |
| No | 32 | 64 |
| | 50 | 100 |

Source: Primary Data

Table-4.12
Gaming Event in the Locality

| Responses | No. of Participants | %age |
|---------------|------------------------|------|
| Yes | 1 | 2 |
| No | 27 | 54 |
| I do not know | 1 | 2 |
| No Response | 21 | 42 |
| | 50 | 100 |

Source: Primary Data

The majority of respondents did not participate in the gaming event in the locality, with 54% indicating they did not attend, while 42% did not respond.

The table shows the percentage of respondents who store and sell gaming equipment, with 58% answering yes, 34% answering no, and 8% not responding.

Table-4.13

Storing and Selling of Gaming Equipment

| Responses | No. of Respondents | Percentage |
|-------------|--------------------|------------|
| Yes | 29 | 58 |
| No | 17 | 34 |
| No Response | 4 | 8 |
| | 50 | 100 |

Source: Primary Data

The majority of respondents in the locality do not have gaming cafes, with only a small percentage indicating that they do.

Table-4.14

Gaming Cafes in the Locality

| Responses | No. of Respondents | Percentage |
|-------------|--------------------|------------|
| Yes | 12 | 24 |
| No | 35 | 70 |
| No Response | 3 | 6 |
| | 50 | 100 |

Source: Primary Data

4.3 Data Interpretation:

As the data are not normally distributed some non-parametric tests were conducted regarding the difference between the earnings from a Gaming Career and earnings from other profession.

1. Income from Video Gaming:

The participants have mentioned that some of them are currently unemployed and have earned random amounts of money from various gigs in the past. Some are pursuing a higher education and are not currently earning any income from it. However, most of them have a part-time job that brings them a monthly income of a certain amount, which they have not mentioned. Additionally, they are employed at a private job where they earn a monthly income of a certain amount, which they have not disclosed. Finally, they have mentioned that they are involved in the digital marketing business. Some individuals were earning Rs. 100000 to 150000 from another profession.

2. The Ways to Develop the Gaming Industry in Assam:

To create awareness about the gaming industry in Assam, there are various ways we can approach it.

1. Firstly, we can organize workshops and seminars in educational institutions and community centers to discuss game development, opportunities, and trends in the gaming industry.
2. Secondly, hosting gaming events, tournaments, or festivals in local arenas can attract both international and local gamers.
3. We can also collaborate with local influencers, bloggers, or YouTubers to promote the gaming industry to their followers.
4. Encouraging and supporting the development of games that reflect Assamese culture, history, or stories can make them relatable to the local population.
5. Moreover, we can tie up with educational institutions to introduce courses on game design, development, and marketing.

6. Using local newspapers, radio, and television to share success stories, interviews with game developers, and insights into the industry can help raise awareness.
7. We can also create social media campaigns or web platforms dedicated to the gaming community in Assam, offering news, updates, and forums for discussion. Lastly, building gaming communities or clubs where enthusiasts can meet, discuss, and share their passion can create a positive impact.
8. Some of the proposed strategies include creating movies or series about the gaming industry, organizing bigger gaming events, reaching out to new generations to raise awareness about career opportunities in the gaming industry, and subscribing to newsletters, blogs, or social media accounts to stay updated on the latest developments and opinions in the gaming world.
9. Moreover, the importance of changing the perception of gaming and educating parents and society about the opportunities in the gaming industry. It also mentions the need to organize gaming tournaments and awareness programs to promote the growth of the gaming industry.
10. Furthermore, the significance of staying healthy while pursuing a gaming career and the potential benefits of some video games on hand-eye coordination, problem-solving skills, and the mind's ability to process information. The text encourages aspiring gamers to be passionate and consistent and to experiment with innovative and inventive game mechanics, cross-platform play, and AI for heightened realism to create trends and lead in the gaming industry.
11. Lastly, the idea of adding classes related to gaming in schools and organizing inter-district gaming competitions to encourage more people to pursue a career in the gaming industry. Overall, the text highlights the potential of the gaming industry in Assam and proposes various strategies to promote and grow it.

3. Problems Faced by The Gamers:

The following seems to be a list of different problems that individuals may face when trying to develop a career in the gaming industry. These issues include

1. A lack of financial support, parental support, technical support, and societal support. Some of the respondents also mentioned "others" as a problem, without specifying what those other issues might be.
2. Financial support is one of the most common problems, followed by a lack of parental and societal support.
3. Technical support is also mentioned frequently, while the other issues seem to be less common.
4. Overall, it is apparent that there are several challenges that individuals may face when trying to pursue a career in the gaming industry.

4. The Way the Gaming Benefits the Players:

The benefits of playing video games extend far beyond mere entertainment. Playing video games has been proven to help students in several ways. Study reveals that:

1. It can improve their grades, help them make friends, enhance their ability to work in groups, and improve their communication skills in class.
2. Furthermore, playing video games can foster important interpersonal skills like teamwork, cooperation, and problem-solving, all of which are essential for success both in and out of school.
3. Whether somebody playing alone or with others, video games offer a unique opportunity to learn and grow in a fun and engaging way. So, if somebody looking for a way to improve their academic performance and build valuable social skills, picking up a video game should be considered.

4.4. Test of Hypothesis:

The following data pertains to the average earning from a career in gaming. The data is based on the analysis of 50 individuals, divided into three classes. The first class consists of 49 individuals, representing 98% of the total sample. The second class has zero individuals, representing 0% of the sample. The third class consists of a single individual, representing 2% of the sample.

The mean earning from a gaming career is 4170, while the median earning is 0. The standard deviation of the data is 17888.4326, with a skewness of 6.55938 and a kurtosis of 44.84353.

The lowest score in the sample is 0, while the highest score is 125000. The range of the distribution is also 125000. There is a total of 50 scores in the sample, with 5 distinct scores. The lowest class value is 0 and the highest class value is 156299. There are a total of 3 classes, with a class range of 52100.

Average Earning from a Gaming Career

| Class | Count | Percentage |
|-----------------|-------|------------|
| 0 - 52099 | 49 | 98 |
| 52100 - 104199 | 0 | 0 |
| 104200 - 156299 | 1 | 2 |
| Total | 50 | 100 |

Distribution Table:

| | |
|---------------------------|------------|
| Mean | 4170 |
| Median | 0 |
| Standard Deviation (s) | 17888.4326 |
| Skewness | 6.55938 |
| Kurtosis | 44.84353 |
| Lowest Score | 0 |
| Highest Score | 125000 |
| Distribution Range | 125000 |
| Total Number of Scores | 50 |
| Number of Distinct Scores | 5 |
| Lowest Class Value | 0 |
| Highest Class Value | 156299 |
| Number of Classes | 3 |
| Class Range | 52100 |

The following statistics represent the average earnings from various professions. The data is presented in a tabular form, with each row representing a different class and displaying the class count, percentage, and number. The table includes a total of 51 scores, with 17 of them being distinct. The lowest score in the data set is 0, and the highest score is 75000. The distribution range is also 75000.

Other important statistics include the mean, median, standard deviation (s), skewness, and kurtosis. The mean is 7249.80392, and the median is 0. The standard deviation is 15228.1641, while the skewness and kurtosis are 2.69119 and 7.99603, respectively.

Furthermore, the data is divided into seven different classes, with the lowest class value being 0 and the highest value being 81199. The class range is 11600.

Average Earning from Other Professions:

| Class | Count | Percentage |
|---------------|-------|------------|
| 0 - 11599 | 40 | 80.4 |
| 11600 - 23199 | 3 | 5.9 |
| 23200 - 34799 | 4 | 7.8 |
| 34800 - 46399 | 1 | 2 |
| 46400 - 57999 | 1 | 2 |
| 58000 - 69599 | 0 | 0 |
| 69600 - 81199 | 1 | 2 |
| Total | 50 | 100 |

Distribution Table:

| | |
|------------------------|------------|
| Mean | 7249.80392 |
| Median | 0 |
| Standard Deviation (s) | 15228.1641 |
| Skewness | 2.69119 |
| Kurtosis | 7.99603 |
| Lowest Score | 0 |

| | |
|---------------------------|-------|
| Highest Score | 75000 |
| Distribution Range | 75000 |
| Total Number of Scores | 51 |
| Number of Distinct Scores | 17 |
| Lowest Class Value | 0 |
| Highest Class Value | 81199 |
| Number of Classes | 7 |
| Class Range | 11600 |

The following data represents the average total income of a sample population, classified into six different classes. The first column shows the income range for each class, while the second column shows the number of individuals in each class. The percentage column represents the percentage of individuals in each class, out of the total sample size of 50.

The mean income of the sample population is shown in column 12364, while the median income is 0. The standard deviation is 27929.10675, and the skewness, kurtosis, lowest score, highest score, and distribution range are shown in columns 4.46257, 24.01651, 0, 175000, and 175000, respectively.

The total number of scores is 50, and there are 18 distinct scores. The lowest class value is 0, while the highest class value is 192599. The number of classes is 6, and the class range is 32100.

The given data shows the distribution of income classes and their respective counts and percentages, with the majority falling within the 0-32099 income range.

Average Total Income

| Class | Count | Percentage |
|-----------------|-------|------------|
| 0 - 32099 | 44 | 88 |
| 32100 - 64199 | 4 | 8 |
| 64200 - 96299 | 1 | 2 |
| 96300 - 128399 | 0 | 0 |
| 128400 - 160499 | 0 | 0 |
| 160500 - 192599 | 1 | 2 |
| Total | 50 | 100 |

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Distribution Table:

| | |
|---------------------------|-------------|
| Mean | 12364 |
| Median | 0 |
| Standard Deviation (s) | 27929.10675 |
| Skewness | 4.46257 |
| Kurtosis | 24.01651 |
| Lowest Score | 0 |
| Highest Score | 175000 |
| Distribution Range | 175000 |
| Total Number of Scores | 50 |
| Number of Distinct Scores | 18 |
| Lowest Class Value | 0 |
| Highest Class Value | 192599 |
| Number of Classes | 6 |
| Class Range | 32100 |

A record of earnings from various sources has been received from the participants. It was to be divided into three sections: "Earning from Gaming Career," "Earning from Other Profession," and "Total Income." Each section features a list of numbers, which may represent earnings in some currency. Some entries have a value of 0, while others

have specific amounts listed. There are also several instances where a value is represented by a placeholder, such as "10000" or "10500". It is unclear who created this record or what purpose it serves, but it appears to be a detailed account of someone's income over a certain period.

Based on the data acquired the hypotheses which were developed are tested. The raw table is appended in the appendices.

First, a Reliability test was conducted to how far the data were reliable. The results of the Reliability Test are as follows:

| | Corrected Item- Total Correlation | Cronbach's Alpha if Item Deleted |
|---|--------------------------------------|-------------------------------------|
| Average Earning from a Gaming Career | 0.7 | 0.82 |
| Average Earning from Other Professions | 0.65 | 0.87 |
| Average Total Income | 1 | 0.52 |

For the interpretation of Cronbach's alpha, the following table from George and Mallery (2003) can be used as a rule of thumb. As the test results show the data are reliable except the total income. The corrected item-total correlation and Cronbach's alpha values indicate the reliability and internal consistency of the measures used to assess average earnings from a gaming career, average earnings from other professions, and average total income.

| Cronbach's Alpha | Interpretation |
|------------------|----------------|
| > 0.9 | Excellent |
| > 0.8 | Good |
| > 0.7 | Acceptable |
| > 0.6 | Questionable |
| > 0.5 | Poor |
| < 0.5 | Unacceptable |

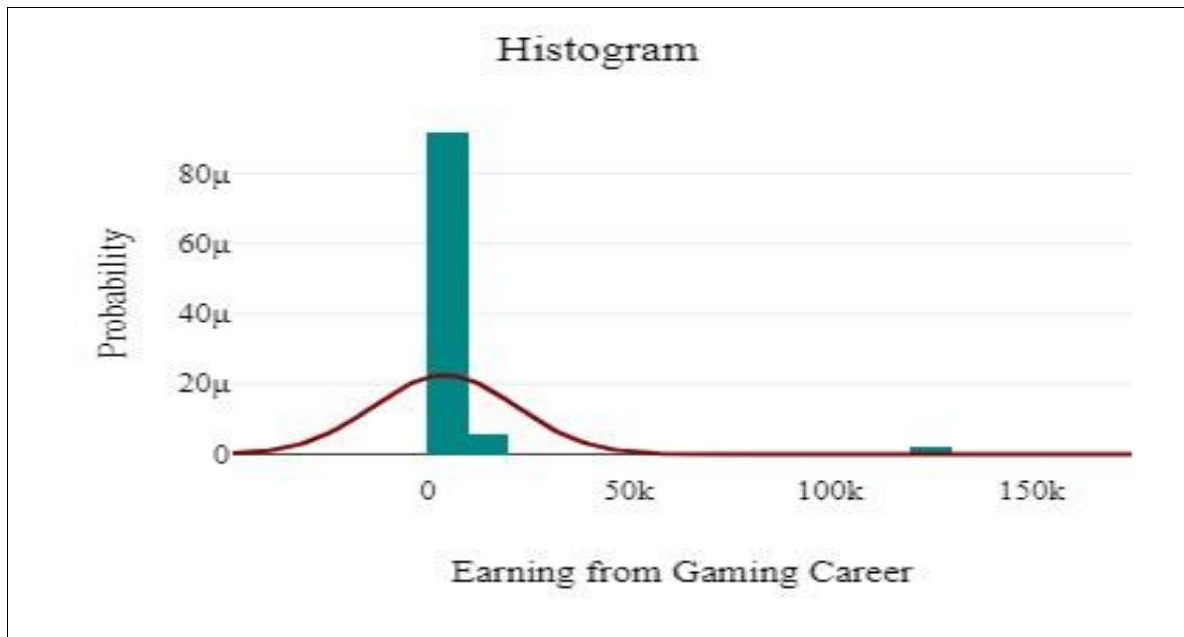
It reveals that the average earning from a gaming career has a higher corrected item-total correlation and a higher Cronbach's Alpha if the item is deleted compared to the average earning from other professions, indicating that a gaming career may be more reliable and consistent in terms of income. Additionally, the average total income has a Cronbach's Alpha of 0.52, which falls under the "poor" interpretation category.

To decide to adopt parametric or non-parametric tests subsequently, the test of Normal Distribution was conducted:

Tests for normal distribution of Earning from Gaming Career:

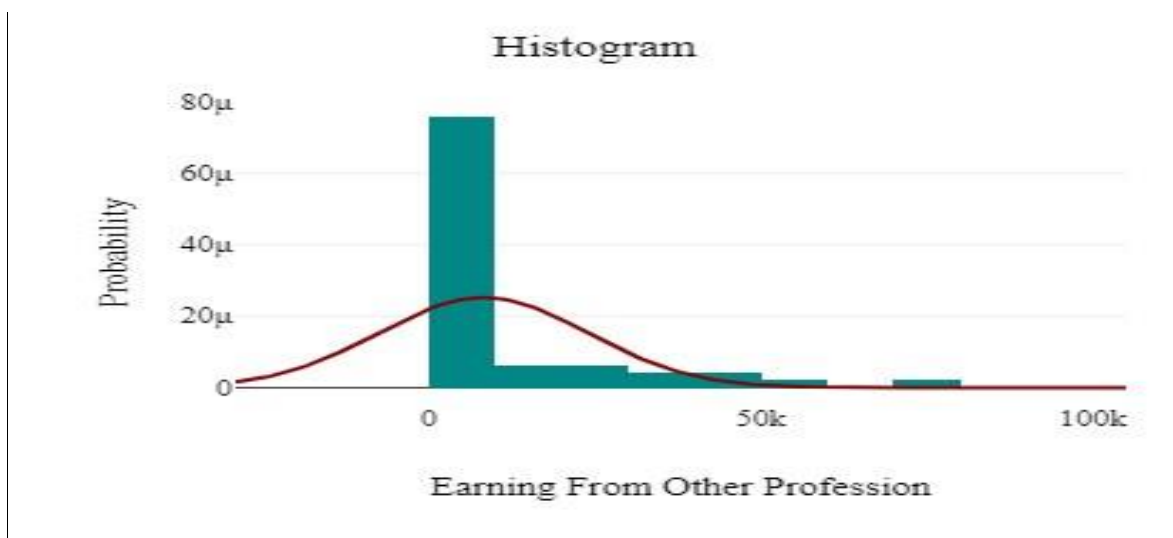
| | Statistics | p |
|---------------------------------------|------------|-------|
| Kolmogorov-Smirnov | 0.41 | <.001 |
| Kolmogorov-Smirnov (Lilliefors Corr.) | 0.41 | <.001 |
| Shapiro-Wilk | 0.23 | <.001 |
| Anderson-Darling | 14.33 | <.001 |

The given statistics show the results of various tests, such as Kolmogorov-Smirnov, Shapiro-Wilk, and Anderson-Darling, with their respective values and significance levels, indicating that the null hypothesis can be rejected in all cases.



Tests for normal distribution of Earning from Other Profession:

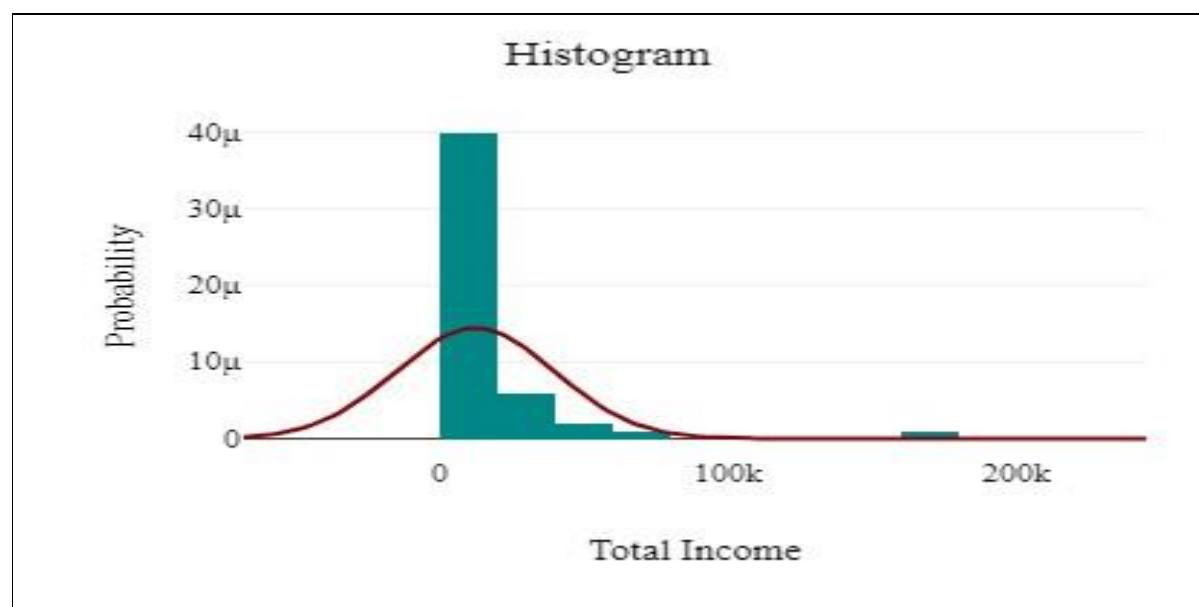
| | Statistics | p |
|---------------------------------------|------------|-------|
| Kolmogorov-Smirnov | 0.38 | <.001 |
| Kolmogorov-Smirnov (Lilliefors Corr.) | 0.38 | <.001 |
| Shapiro-Wilk | 0.6 | <.001 |
| Anderson-Darling | 8.54 | <.001 |



The statistical tests, Kolmogorov-Smirnov, Shapiro-Wilk, and Anderson-Darling, were conducted, and the results indicate significant differences between the observed data and the expected distribution.

Tests for normal distribution of Total Income:

| | Statistics | p |
|---------------------------------------|------------|-------|
| Kolmogorov-Smirnov | 0.33 | <.001 |
| Kolmogorov-Smirnov (Lilliefors Corr.) | 0.33 | <.001 |
| Shapiro-Wilk | 0.48 | <.001 |
| Anderson-Darling | 8.12 | <.001 |



The given statistics show the test results for different statistical tests, with the p-values indicating a significant difference from the null hypothesis in all cases. The Above tests show that the data are not normally distributed. Therefore, to test the significant difference between the variables non-parametric tests are conducted.

Friedman Test:

| Null hypothesis | Alternative hypothesis |
|--|--|
| There is no difference between the dependent variables Average Earnings from a Gaming Career, Average Earnings from Other Professions, and Average Total Income. | There is a difference between the dependent variables Average Earnings from a Gaming Career, Average Earnings from Other Professions, and Average Total Income |

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Descriptive Statistics:

| | n | Mean | Median | Standard deviation |
|--|----|-------|--------|--------------------|
| Average Earning from a Gaming Career | 50 | 4170 | 0 | 17888.43 |
| Average Earning From Other Professions | 50 | 8194 | 0 | 15983.61 |
| Average Total Income | 50 | 12364 | 0 | 27929.11 |

Ranks:

| | Mean Rank |
|--|-----------|
| Average Earning from a Gaming Career | 1.78 |
| Average Earning from Other Professions | 1.95 |
| Average Total Income | 2.27 |

The test reveals that the average earning from a gaming career is lower than the average earning from other professions, but the average total income is still relatively high.

Statistics:

| Chi ² | df | p |
|------------------|----|------|
| 6.19 | 2 | .045 |

Pairwise comparison (Dunn-Bonferroni test)

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| | Test statistics | Standard error | Std. test statistics | p | Adj. p |
|---|--------------------|-------------------|-------------------------|------|-----------|
| Average Earning from Gaming Career - Average Earning from Other Profession | -0.17 | 0.2 | -0.85 | .395 | 1 |
| Average Earning from Gaming Career - Average Total Income | -0.49 | 0.2 | -2.45 | .014 | .043 |
| Average Earning From Other Profession - Average Total Income | -0.32 | 0.2 | -1.6 | .11 | .329 |

According to the statistics, there is a significant negative correlation between average earnings from a gaming career and average total income, while there is no significant correlation between average earnings from gaming career and average earnings from another profession.

In each row, the null hypothesis is tested if both samples are the same, the "Adj. p-value" is obtained by multiplying the p-value by the number of tests.

A Friedman test showed that there was a significant difference between the dependent variables, $p = .045$.

4.5. Results Interpretation:

The analysis conducted indicates that the data under study do not follow a normal distribution. Therefore, non-parametric tests are performed to examine the significant differences between the variables. Specifically, the Friedman test is conducted to test the null and alternative hypotheses. The null hypothesis states that there is no difference between the dependent variables, namely Average Earnings from a Gaming Career, Average Earnings from Other Professions, and Average Total Income, while the alternative hypothesis suggests that there is a difference between these variables.

Descriptive statistics were also computed for the various dependent variables, including the sample size (n), mean, median, and standard deviation. The results indicated that the average earnings from a gaming career had a mean of 4170 and a standard deviation of 17888.43, while the average earnings from other professions had a mean of 8194 and a standard deviation of 15983.61. Additionally, the average total income had a mean of 12364 and a standard deviation of 27929.11.

Further analysis was conducted using ranks and statistics, which revealed that the mean rank for average earnings from a gaming career was 1.78, while that for average earnings from other professions was 1.95, and for average total income was 2.27. The chi-square value was found to be 6.19, with two degrees of freedom and a p-value of .045.

Finally, a pairwise comparison using the Dunn-Bonferroni test was conducted to examine the differences between the variables. The results indicated that there was no significant difference between average earnings from a gaming career and average earnings from other professions. However, there was a significant difference between average earnings from a gaming career and average total income, with a test statistic of -2.45 and a p-value of .014. The adjusted p-value for this comparison was .043. There was also no significant difference between average earnings from other professions and average total income.

4.6. Findings of the Study:

1. The Gaming Industry is Controlled by the New IT Rules 2023:

The new IT Rules 2023 have introduced several changes to regulate the online gaming industry in India. The changes include setting up a mechanism to address complaints, creating a code of ethics for intermediaries, and ensuring the protection of user data. Online gaming companies are now required to appoint a grievance officer, a nodal officer, and a chief compliance officer to resolve complaints quickly. The code of ethics for online gaming intermediaries prohibits the promotion of violent, hateful, or discriminatory content. It also prohibits harm to minors and addiction. Additionally, online gaming companies must obtain user consent before collecting and processing their data. Page | 50

2. It Is the Responsibility of The Intermediaries to Protect the Users:

Intermediaries such as social media, online gaming, and significant social media must ensure their services comply with government rules. They must prevent users from violating these rules by publishing them in a language users can understand. Intermediaries must avoid hosting, storing, or publishing prohibited information and inform users of their right to terminate access if they do not comply. Online gaming platforms must identify and verify user identity before accepting deposits for real-money games.

3. The Ministry Can Select Self-Regulatory Bodies:

The Ministry can select self-regulatory bodies for verifying the legitimacy of real-money online games. Companies meeting specific requirements can apply, which include being registered under the Companies Act, of 2013, promoting online games responsibly, having a Board of reputable individuals without conflict of interest, and including members with relevant expertise.

4. The Regulatory Body Must Maintain an Updated List of Online Games:

The regulatory body must maintain an updated list of all verified online games and its members. The regulatory body can suspend or revoke the verification of any online real-money game that does not comply with the rules. Any verified online real-money game must display a visible mark of verification. The Central Government may take into consideration the details published by an online gaming regulatory body before issuing a direction.

5. Regulatory Body Must Publish the Grievance Redressal Procedure on Its Website:

The regulatory body must publish its framework for complaints on its website or mobile-based application. The Ministry may direct the regulatory body to take measures to rectify the verification of an online real-money game. The government may issue a notification in the Official Gazette, directing online gaming intermediaries to follow certain obligations for an online game.

6. Intermediaries to Provide the Details to the Ministry:

Intermediaries must publish a statement on their website and app informing publishers to provide user details to the Ministry (rule 18). The Ministry will administer this rule and may issue an order to websites or apps that threaten India's sovereignty, security, foreign relations, or public order. Non-compliance with these rules can result in penalties under the Indian Penal Code.

7. India Has a Three-Tier Structure for Ensuring Compliance and Addressing Complaints:

The Code of Ethics for publishers in India has a three-tier structure for ensuring compliance and addressing complaints. The first level requires publishers to establish a complaint mechanism and appoint a Grievance Officer. The second level involves self-regulating bodies of publishers, headed by a retired judge or eminent person. The

Ministry oversees the third level, which includes an Inter-Departmental Committee to hear complaints and issue guidance and directions to publishers.

8. The Online Gaming (Regulation) Bill, was Introduced in 2022:

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The Online Gaming (Regulation) Bill, of 2022 defines terms used in online gaming and establishes the Online Gaming Commission to regulate it. Online gaming can only be done through a licensed gaming website and server. Anyone operating without a license will be punished. A license can be obtained by application to the Commission. The licensee must exhibit all rules governing the conduct of online gaming on the approved website. The Commission can make rules for carrying out the purposes of this Act.

9. India Experienced Fluctuated Numbers of Internet Users:

As of January 2023, there are 692.0 million internet users in India, and 48.7% of people have access to the internet. Between 2022 and 2023, the number of internet users in India remained constant. To put things into perspective, these user statistics show that 730.0 million Indians were not online at the beginning of 2023, indicating that 51.3% of the country's population was not online.

10. Advanced Techlogy Has Resulted the Rise of Gaming Industry:

The gaming industry in India is transforming with the integration of advanced technologies such as 3D designs, Virtual Reality (VR)/Augmented Reality (AR), and Artificial Intelligence (AI). This has resulted in the creation of more realistic and vibrant games. The utilization of AR technology in mobile phone games is revolutionizing the gaming experience by providing real-life effects like music and images. The gaming industry in India is expanding rapidly, and it is playing a vital role in the growth of the entire gaming culture.

11. Playing Video Game is Both Source of Entertainment and Income:

Playing video games is not just a source of entertainment; it has proven to be beneficial for students in several ways. Studies have shown that playing video games can improve grades, help students make friends, enhance their ability to work in groups and improve their communication skills in class. Furthermore, video games can foster crucial interpersonal skills like teamwork, cooperation, and problem-solving, which are essential for success both in and out of school. Playing video games provides a unique opportunity to learn and grow in a fun and engaging way. Therefore, if someone is looking for a way to improve their academic performance and build valuable social skills, they should consider picking up a video game.

4.7. Findings from the Field Study:

12. Measures to Promote the Gaming Industry in Assam:

To promote the gaming industry in Assam, various approaches can be taken. The participants suggested the following measures:

1. Firstly, workshops and seminars can be organized in educational institutions and community centers to discuss game development, opportunities, and trends in the gaming industry.
2. Secondly, hosting gaming events, tournaments, or festivals in local arenas can attract both international and local gamers.
3. Thirdly, collaborating with local influencers, bloggers, or YouTubers can help promote the gaming industry to their followers. Encouraging and supporting the development of games that reflect Assamese culture, history, or stories can make them relatable to the local population.
4. Moreover, tying up with educational institutions to introduce courses on game design, development, and marketing can also be helpful.

5. Using local newspapers, radio, and television to share success stories, interviews with game developers, and insights into the industry can help raise awareness.
6. Creating social media campaigns or web platforms dedicated to the gaming community in Assam, offering news, updates, and forums for discussion can also be beneficial.
7. Lastly, building gaming communities or clubs where enthusiasts can meet, discuss, and share their passion can create a positive impact.

13.Challenge Faced by The Gamers:

According to the participants several challenges can be faced by individuals attempting to develop a career in the gaming industry.

1. Some of the most common problems include a lack of financial, parental, technical, and societal support. Financial support is the most frequently mentioned issue, followed by a lack of parental and societal support.
2. Technical support is also mentioned frequently, while other issues seem to be less common. Overall, it is apparent that there are several challenges that individuals may face when pursuing a career in the gaming industry.

Based on the analysis conducted, it appears that the data under study do not follow a normal distribution. As a result, non-parametric tests were employed to examine the significant differences between the variables. Specifically, the Friedman test was conducted to test the null and alternative hypotheses. The null hypothesis states that there is no difference between the dependent variables, namely Average Earnings from a Gaming Career, Average Earnings from Other Professions, and Average Total Income, while the alternative hypothesis suggests that there is a difference between these variables. The following information were found from the study based on the statistical test:

1. Descriptive statistics were also computed for the various dependent variables, including the sample size (n), mean, median, and standard deviation. The results

indicated that the average earnings from a gaming career had a mean of 4170 and a standard deviation of 17888.43, while the average earnings from other professions had a mean of 8194 and a standard deviation of 15983.61. Additionally, the average total income had a mean of 12364 and a standard deviation of 27929.11.

2. Further analysis was conducted using ranks and statistics, which revealed that the mean rank for average earnings from a gaming career was 1.78, while that for average earnings from other professions was 1.95, and for average total income was 2.27. The chi-square value was found to be 6.19, with two degrees of freedom and a p-value of .045.
3. Finally, a pairwise comparison using the Dunn-Bonferroni test was conducted to examine the differences between the variables. The results indicated that there was no significant difference between average earnings from a gaming career and average earnings from other professions. However, there was a significant difference between average earnings from a gaming career and average total income, with a test statistic of -2.45 and a p-value of .014. The adjusted p-value for this comparison was .043. There was also no significant difference between average earnings from other professions and average total income.

4.8. Inferences:

1. Regulating the gaming industry is crucial due to the involvement of real money, highlighting the significance of government oversight.
2. Intermediaries such as social media and online gaming platforms must prioritize adherence to government regulations by enforcing user compliance, preventing the spread of prohibited content, informing users about access termination, and verifying user identities on gaming platforms.
3. The Ministry has the authority to designate self-regulatory bodies to ensure the legality and responsible operation of real-money online games, which includes requirements such as company registration, responsible promotion, reputable board members, and relevant expertise.

4. The regulatory body is required to update verified online games, suspend or revoke verifications for non-compliant games, and display a visible verification mark.
5. The Ministry has the authority to designate self-regulatory bodies to ensure the legality and responsible operation of real-money online games, which includes requirements such as company registration, responsible promotion, reputable board members, and relevant expertise.
6. Intermediaries are required to notify publishers to share user information with the Ministry, and failure to comply may result in penalties under the Indian Penal Code, as it aims to protect India's sovereignty, security, foreign relations, and public order.
7. India has implemented a Code of Ethics that includes a complaint mechanism, self-regulating bodies, and an Inter-Departmental Committee overseen by the Ministry to address complaints and ensure compliance.
8. The Online Gaming (Regulation) Bill of 2022 aims to establish the Online Gaming Commission to regulate online gaming, ensuring that it is conducted through licensed platforms and that licensees follow the set rules.
9. India has a significant number of internet users, but there is still a large portion of the population that does not have access to the internet.
10. India's gaming industry is experiencing significant growth by incorporating cutting-edge technologies such as 3D designs, VR/AR, and AI to develop immersive and lifelike games, ultimately enhancing the overall gaming experience.
11. Video games have been found to improve academic performance, social skills, and interpersonal abilities, making them an effective and enjoyable tool for learning.
12. The suggested strategies aim to enhance the gaming industry in Assam by attracting gamers, promoting local culture, and making a positive impact on the industry.
13. Gamers in the gaming industry encounter various obstacles, primarily financial, parental, technical, and societal support, with financial support

being the most prevalent issue, followed by parental and societal support, while technical support also poses a common concern.

14. The study concluded that the average earnings from a gaming career were significantly lower than those of other professions, with a higher standard deviation indicating greater variability in earnings.
15. Gaming careers have higher average earnings compared to other professions and total income.
16. There is no significant disparity in average earnings between gaming careers and other professions, but there is a notable difference when comparing gaming career earnings to average total income.

4.9. Summary:

The IT Rules 2023 in India regulate the online gaming industry, introducing mechanisms for complaint resolution, a code of ethics for intermediaries, and data protection. Companies must appoint officers, obtain user consent, and comply with government rules. The Ministry can appoint self-regulatory bodies to verify real money games' legitimacy. The Online Gaming Commission was established to regulate online gaming, requiring licensed websites and servers and adherence to rules. Non-compliance may result in penalties under the Indian Penal Code. India's gaming industry is rapidly expanding, utilizing advanced technologies like 3D designs, VR/AR, and AI to enhance gaming experiences. To boost the industry in Assam, strategies include organizing workshops, hosting events, collaborating with local influencers, introducing courses, using local media, creating social media campaigns, and building gaming communities. However, gamers face challenges like lack of financial, parental, technical, and societal support. A study found that gaming career average earnings were 1.78, higher than other professions and total income, with no significant difference between earnings and total income.

The gaming industry in India is growing rapidly and utilizing advanced technologies, but gamers in Assam face challenges and lack support. Non-compliance with

regulations may lead to penalties, but a study shows that gaming careers can be financially rewarding.

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Google Questionnaire Format

Hi, my name is Debasis Das I am a student of M.Com. 3rd Sem of Nalbari Commerce College. I am conducting a survey on the current condition of gamers and the gaming industry in Assam for my dissertation. Please fill up this form and help me in my research. Thank You.

Page | II

* Indicates a required question

| |
|-------------|
| Name * |
| Your answer |

| |
|-------------|
| Age |
| Your answer |

| |
|-----------------------|
| Address and Contact * |
| Your answer |

| |
|-----------------|
| Gender |
| Male |
| Female |
| Others |
| Clear selection |

| |
|---|
| When did you start building your interest in gaming? (in Age) |
| 5-10 |
| 10-15 |
| 15-20 |
| 20 or above |
| Clear selection |

How many hours a week do you play video games?

0-2

4-7

8-11

12 or more

Clear selection

Do you have the following gaming equipment?

Graphics Card

Gaming processor

Gaming Keyboard/Mouse

Gaming Headphones

Gaming Monitor

Gaming Chair

In which device do you play more often?

Mobile

PC/Laptop

Console

Clear selection

Are you interested in making your career in gaming?

Yes

No

Clear selection

In which of the following professions you would like to go for in the gaming industry?

Animator

Video Game Designer

Game Tester

Game Critic

Clear selection

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Are you a professional gamer?

Yes

No

Clear selection

Have you participated in any tournament? If yes, please mention it.

Your answer

What is the game of your interest?

Fortnite

COD Warzone

Valorant

BGMI

Free Fire

Mobile Legends

Genshin Impact

Others

Are you aware of the gaming tournaments happening in India or abroad?

Yes

No

Clear selection

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Have you won any prizes in any tournament? If yes, please mention it.

Your answer

Do tournaments happen regularly in your locality? If yes, please mention it.

Your answer

Does your locality have stores that sell gaming equipment?

Yes

No

Clear selection

Does your locality have gaming cafes or malls where you can experience different kinds of games?

Yes

No

Clear selection

Are you earning from your gaming career?

Yes

No

Clear selection

If you earn from your gaming career, please mention the yearly range.

1000-10000

10000-15000

15000-20000

20000 or more

Clear selection

Are you earning from any other profession? How much do you earn monthly?

Your answer

From where do you get the financial support?

Self-Support

Sponsorship

Others

Clear selection

Are you getting support from your family or society in developing your career in the gaming industry?

Yes

No

Clear selection

Do you think our society is aware of the career options in the gaming industry?

Yes

No

Clear selection

How has playing video games helped you in school?

Better Grades

Making Friends

Working in Groups

Communicating in Class

What are the problems you are facing in developing a career in the gaming industry?

Lack of Financial Support

Lack of Parental Support

Lack of Technical Support

Lack of Societal Support

Others

What is your suggestion to make people aware of the gaming industry in Assam? *

Your answer

Submit